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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,239	08/22/2003	Stefan Bertil Ohlsson	2002B1172	9391
23455 7590 02/12/2008 EXXONMOBIL CHEMICAL COMPANY 5200 BAYWAY DRIVE P.O. BOX 2149 BAYTOWN, TX 77522-2149				
EXAMINER BRUENIES, CHRISTOPHER P				
ART UNIT		PAPER NUMBER		
1794				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/646,239

**Applicant(s)**

OHLSSON, STEFAN BERTIL

**Examiner**

CHRISTOPHER P. BRUENJES

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 56-137 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 56-137 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 18, 2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 56-137 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lue et al (USPN 6,255,426) in view of Takahashi et al (EP 982 362 A1) and Wong et al (USPN 6,358,457).

Regarding claims 74-80, 87-99, 105-108, 110-111, and 131-137, Lue et al teach a multilayer stretch film comprising at least two layers (col.12, l.17). At least one of the layers comprises a polyethylene copolymer having a CDBI of at least 70%, a melt index of from 0.1 to 15 g/10min, a density of from 0.910 to 0.930 g/ml, a melt index ratio of from 35 to 80, and an Mw/Mn ratio of from 2.5 to 5.5, wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/mil and M in psi such that D is greater than or equal to  $2.0 \times [100 + e^{(11.71 - 0.000268 \times M + 2.183 \times 10^{-9} \times M^2)}]$ , which is equivalent to the formula claimed (see abstract and col.4, l.48-50 and l.60). The CDBI is at least 85% (col.9, l.43). The melt index is from 0.3 to 10 g/10min (col.4, l.57). The film is wrapped around articles when used as garbage and shopping bags or shrink film (col.10, l.57-59).

Lue et al fail to teach that at least one layer comprises one or more tackifiers. However, Takahashi et al teach that it is well known in the art to add tackifiers or cling additives such as low molecular weight polyisobutylene (PIB) in order to provide the packaging film with cling properties (p.34, l.51-55 and p.40, l.54-58). Therefore, one of ordinary skill in the art would have recognized that tackifiers such as PIB are added to at least one of the layers of the stretch film in order to provide the packaging film with cling properties, as taught by Takahashi et al. Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add a tackifier or cling agent such as PIB to the stretch film of Lue et al,

in order to provide the stretch film with cling properties, as taught by Takahashi et al. Furthermore, the tackifier or cling agents are added to the stretch film in an amount not detrimental to the improved film properties with regard to the stretch and wrap ability of the film, as taught by Takahashi et al on page 34, lines 51-55. Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add the tackifier or cling agent to the layer within the claimed ranges in order to provide the film with cling properties without damaging the improved film properties, as taught by Takahashi et al. Regarding claims 110-111, the film obviously has a cling within the claimed range when PIB is added to at least one of the layers because the range is typical range for cling properties so that the film will properly cling to other objects.

Regarding claims 56-73, 81-86, 100-103, 109, and 112-130, Lue et al in combination with Wong et al and Takahashi teach all of the limitations as shown above with regard to claims 74-80, 87-99, 104-108, 110-111, and 131-137. Takahashi et al also teach that it is well known that packaging films are formed from polyethylene copolymers as monolayer films or multilayer films (p.34, l.28-30). Takahashi et al also teach other layers are added to polyethylene copolymer films in order to provide additional properties, such as making one surface of the film tacky and the other non-tacky. Takahashi et al teach that in order to provide these properties two additional layers are used, one on either side, of the polyethylene copolymer film (p.34, l.31-39). One of ordinary skill in the art at the time Applicant's invention was made would have recognized that a layer is added on either side of a polyethylene copolymer film used in packaging in order to give that film one tacky surface and one non-tacky surface, as taught by Takahashi et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form the film of Lue et al having more than one layer, as a three layered film with the polyethylene copolymer forming the intermediate layer, depending on the intended end result of the film, as taught by Takahashi et al.

Lue et al and Takahashi et al combined fail to explicitly teach that the film has a particular natural draw ratio and tensile stress at separate elongation values. Note the limitation "wherein the film has a natural draw ratio of at least 250%, 275%, or 300%, a tensile stress at the natural draw ratio of at least 22, 24, or 26MPa, and a tensile stress at second yield of at least 12MPa or 14MPa" does not require the film to actually be drawn or stretched, it merely states that the film has these properties. Wong et al teach that the natural stretch ratio is determined by factors such as the polymer composition and morphology caused by the process of forming the film (col.7, l.4-7). In this case, the film of Lue et al and Takahashi et al has the exact same composition and is made by the same process. Lue et al teach that the film is used as a shrink film (col.10, l.57), which obviously must be stretched in order to allow the film to shrink.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made, since the film is formed of the same composition and made by the same process, would obviously have a natural draw ratio of the film of at least 300%, a tensile stress at the natural draw ratio of at least 26MPa, a tensile stress at the second yield of at least 14MPa, a tensile stress at first yield of at least 9MPa, and the film obviously has a yield plateau with a linear portion having a slope of at least 0.020 MPa per %elongation, as taught by Wong et al.

***Response to Arguments***

5. Applicant's arguments filed January 17, 2008 have been fully considered but they are not persuasive.

In response to Applicant's argument that there is no mention of using polyisobutylene in an amount of 0.25 to 6 wt% in the references cited, although the references are silent on how much cling additive is added in the form of polyisobutylene, Takahashi does teach that the filler is added in amounts not detrimental to the improved film properties. Therefore, Takahashi teaches that the additive should be added in an amount that would provide cling but not detrimentally affect the film properties before adding the additive, and one of ordinary skill in the art would be able to optimize the amount of polyisobutylene used to provide desired cling without detrimentally affecting the film properties, which would arrive at a small percentage such as the claimed 0.25 to 6wt%.

In response to Applicant's argument that the obviousness rejection has not met the Graham test for an "obvious to try" rejection. First, the rejection is not merely an "obvious to try" rejection because the secondary reference specifically provides motivation to add polyisobutylene to polyethylene based stretch films such as the film of the primary reference for the specific purpose of adding cling to the film and provides rationale for using a limited amount of additive to prevent detrimental affect to the film properties. There is no requirement that the motivation for forming an obvious rejection be the same motivation for utilizing the components claimed as the applicant. Second, the rejection does meet the "obvious to try" rationale provided by the MPEP. Takahashi teaches that there is a recognized problem in that for some uses stretch films require cling properties. There are a finite number of identified, predictable potential

solutions to the recognized need provided by Takahashi for solving the need to have cling properties which included providing a cling agent in the form of polyisobutylene. One of ordinary skill in the art could have pursued the cling agent provided as an example in Takahashi of polyisobutylene with a reasonable expectation of success because Lue and Takahashi are both teaching polyethylene based stretch films so it would be reasonable that a similar cling agent would work in both films. It is noted the Applicant has not provided any additional findings or secondary considerations for a showing against obviousness.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER P. BRUENJES whose telephone number is (571)272-1489. The examiner can normally be reached on Monday thru Friday from 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes  
Examiner  
Art Unit 1794

/Christopher P Bruenjes/  
Examiner, Art Unit 1794  
February 8, 2008